

of the tubing 288. With this arrangement, the tubing 288 can be wound in approximately seven loops with the two ends extending through the fittings in the top support, one being connected from there to the hollow needle and the other being connected to receive the fluid.

IN THE CLAIMS:

Add new claims 52-60 as follows:

Cap or lid or top

52. (New) A method of filling a container with liquid through a valve having a valve opening comprising the steps of:

placing a cap having said valve and a valve actuator on the top of the container;
actuating the valve actuator to open a conduit between the top and bottom of the cap to the bottom through said valve opening, whereby a needle may be inserted through the valve opening and into the container to fill the container while allowing liquid to flow up into the top of the cap; and

actuating the valve to close the opening after withdrawing the needle through the conduit when the container is filled, whereby the valve may be closed while liquid is above it;

said step of actuating the valve including the step of automatically actuating the valve actuator in synchronization with the needle.

53. (New) A method in accordance with claim 52 further including the step of closing an opening in the top of the cap before the needle is inserted through the valve opening.

54. (New) A method in accordance with claim 53 in which the step of closing an opening includes the step of moving a fluid socket of a needle assembly into an upwardly extending funnel shaped cavity of the cap, wherein the funnel is sized and shaped to receive the fluid socket of the needle assembly so the socket seals the cavity during filling.

55. (New) A method in accordance with claim 53 in which the step of closing an opening includes the step of moving a fluid socket over the cap, wherein the cap is sized to fit within the socket.

56. (New) A method according to claim 52 in which the step of inserting the needle includes the steps of:

inserting the needle through an upwardly extending funnel shaped cavity adapted to receive overflowing liquid;

inserting the needle through a valve member located below the cavity, wherein said valve member has an opening to narrowly receive a hollow needle wherein the valve may be closed while permitting liquid to be maintained in the cavity above the valve during filling of the container, thus preventing the container from being exposed to atmosphere through the valve;

inserting the needle through the narrow opening, wherein all valves between the bottom of the cap and the cavity are arranged to remain open until closed by an external force; and

filling the container as the needle is withdrawn until the funnel is full.

57. (New) A method in accordance with claim 52 in which the valve opening is perpendicular to the longitudinal axis of the valve member, wherein the step of actuating the valve includes the step of aligning the opening in one position with the container to open the container, and aligning the opening in a second position to close the container.

58. (New) A method in accordance with claim 52 in which the step of actuating the valve actuator includes the step of gripping the valve actuating member with a valve grip when the container is moved to a filling station, wherein a valve grip rotates in response to movement of a cam follower engaged by a cam shaft to either open or close the valve.

59. (New) A method in accordance with claim 52 in which the step of actuating the valve actuator includes the step of turning a horizontally-positioned valve actuator to permit automatic opening and closing of the valve, wherein said valve actuator has a height no smaller than 0.250 inch nor greater than 0.750 inch.

60. (New) A method in accordance with claim 52 in which the step of actuating the valve actuator includes the steps of turning a horizontally-positioned valve actuator to permit automatic opening and closing of the valve; said valve actuator having a length no smaller than 0.250 inch nor greater than 0.750 inch.
